ISS

Fast hydrogen peroxide transfer air-lock
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Fast hydrogen peroxide air-lock for transferring materials into and out of isolators

The introduction of materials (e.g. microbiological monitoring equipment) into production isolators is not only a critical process, but also a time-consuming one. With the Bosch ISS, you benefit from an air-lock system that greatly accelerates the transfer processes without impacting pharmaceutical safety.

The stand-alone version of the ISS is equipped with a Rapid Transfer Port (RTP), instead of an internal door. After bio-decontamination, the material is introduced into the RTP for transfer into the isolator. The integrated glass door is equipped with a glove port for this purpose.

The mobile trolley enables the convenient loading and unloading of material into and out of the isolator in a safe and reliable fashion.
Independent and flexible
The ISS works completely independently from the main isolator. After the ISS has been loaded, the bio-decontamination of the material takes place fully independently from the process status of the main isolator. Thanks to this separation, the integrated door of the transfer air-lock can be opened while the main isolator is in operation, allowing for material transfers to be optimally adapted to the main isolator’s production cycle.

SafeVAP – The proven bio-decontamination process from Bosch
The ISS utilizes a compact version of the Bosch SafeVAP system, which, in a dry procedure involving the evaporation of hydrogen peroxide and its introduction into the process zone for a predefined time period, brings about reliable microbial inactivation. The fact that no sensors are required for monitoring the cycle is a considerable advantage of this time-based process. A typical bio-decontamination cycle with the ISS takes only approximately 20 minutes (depending on the material introduced).

The ISS uses exclusively outside air from the immediate environment (no recirculation), which is filtered through HEPA filters (class H14). The exhaust air is conveyed directly out of the building or recirculated, through H₂O₂ catalytic converters, back into the immediate environment.

ADVANTAGES AT A GLANCE
▶ Short cycle times for bio-decontamination with H₂O₂
▶ Transfer chamber available fully integrated or stand-alone
▶ Proven technology
▶ Easy integration into existing cleanrooms
▶ Fully validated transfer processes
▶ Different chamber sizes available
▶ Flexible integration into different line concepts

▲ Version with enlarged processing chamber